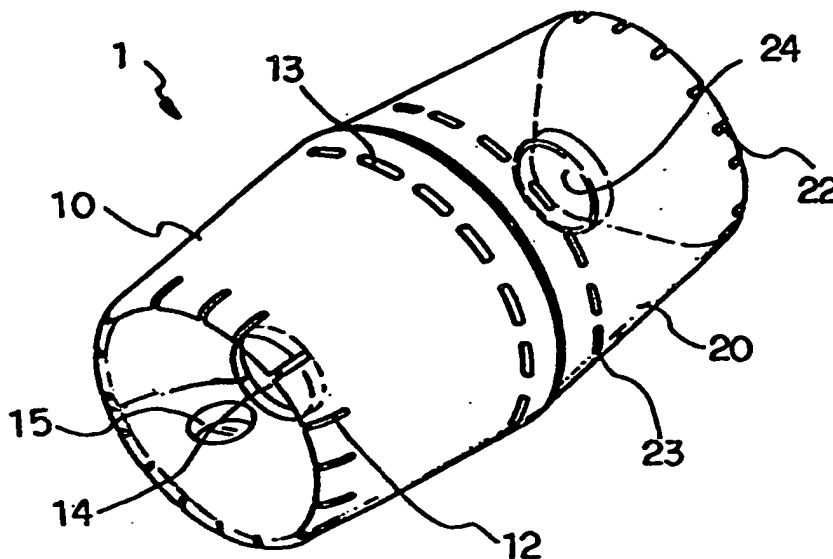




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(54) Title: METHOD FOR MANUFACTURING FISHTRAPS



(57) Abstract

A method for manufacturing fishtraps is disclosed. The method manufactures the fishtraps at a low cost and provides the fishtraps of a good transparency and high strength. In the method, first and second fishtrap parts (10, 20) are molded into a single structure by a blow molding process. The single structure in turn is divided into the first and second fishtrap parts. The first and second fishtrap parts are, thereafter, punched in order to form a plurality of holes (12, 13, 22, 23). The fishtraps are preferably formed of polyethylene terephthalate. The junction between the first and second fishtrap parts is provided with female and male screw portions (11, 21). The screw portions are separated from each other and belong to the first and second fishtrap parts, respectively, when dividing the single structure into the respective fishtrap parts.

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METHOD FOR MANUFACTURING FISHTRAPS

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates in general to fishtraps
5 used for catching fish in a river or reservoir and, more particularly, to a method for manufacturing such fishtraps by blow-molding synthetic resin.

Description of the Prior Art

10 A cylindrical fishtrap, which is provided with
hoppers on both ends for guiding fish into the fishtrap,
has been proposed and used. In order to catch fish using
the above fishtrap, paste bait for a decoy is applied to
the hoppers of the fishtrap prior to carefully setting the
15 fishtrap in the water of a river or reservoir. Fish,
which intrinsically swim upstream and are lured by the
paste bait smelling like sesame, are guided into the
fishtrap through the hoppers and are prevented from
escaping. The fishtrap is pulled out of water after a
20 predetermined time so that the fish are easily caught.

The typical fishtraps have been generally
manufactured by an injection molding process of synthetic
resin. The typical injection molding process for

manufacturing the fishtraps has an advantage in that the process easily forms fishtraps of various configurations because the process is performed using injection molds, which are easily shaped into a desired configuration and construction. However, the fishtraps manufactured by the injection molding process must be thickened in order to prevent cracking of the fishtraps. In this regard, the typical injection molding process for manufacturing the fishtraps has problems in that it not only provides added weight to the fishtraps, it also wastes the synthetic resin and thereby increases the cost of the fishtraps.

In addition, the fishtraps manufactured only by the injection molding process have a bad transparency due to both their thickness and the intrinsic characteristics of the synthetic resin. The above fishtraps have a bad thermal resistance and bad cold temperature resistance. Another problem of the above fishtraps resides in that the fishtraps have an inferior strength and impact resistance so that they may be easily scratched, damaged or broken.

SUMMARY OF THE INVENTION

It is, therefore, an object of the present invention to provide a method for manufacturing fishtraps by which the above problems can be overcome and which manufactures

fishtraps at a low cost and provides fishtraps of a good transparency and high strength.

In order to accomplish the above object, the present invention provides a method for manufacturing a fishtrap comprising the steps of molding first and second fishtrap parts into a single structure by a blow molding process, dividing the single structure into the first and second fishtrap parts, and punching the first and second fishtrap parts in order to form a plurality of holes on the respective parts.

BRIEF DESCRIPTION OF THE DRAWINGS

The above and other objects, features and other advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings, in which:

Fig. 1 is a perspective view of a fishtrap manufactured by the method according to the preferred embodiment of the present invention;

Fig. 2 is a sectional view of the fishtrap after a first step of the method of this invention;

Fig. 3 is a sectional view of the fishtrap after a second step of the method of this invention;

Fig. 4 is a sectional view of the fishtrap after a

third step of the method of this invention; and

Fig. 5 is a sectional view showing the structure for coupling the divided first and second fishtrap parts into a single body.

5 DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 is a perspective view of a fishtrap manufactured by the method according to the preferred embodiment of the present invention. As shown in Fig. 1, the fishtrap 1 of this invention comprises two parts, that is, first and second fishtrap parts 10 and 20, which are selectively coupled together into a single body prior to using the fishtrap 1 for catching fish. The two parts 10 and 20 can be separated from each other when the fishtrap 1 is stored out of season.

15 The method for manufacturing the above fishtrap 1 according to this invention comprises the following three steps.

A. the first step : the first and second parts 10 and 20 are molded into a single structure by a blow molding process using blow molds as shown in Fig. 2.

B. the second step : the single structure of the

first step is divided into two parts 10 and 20 using a cutting means as shown in Fig. 2.

C. the third step : each part 10, 20 is punched by a punching means thus being provided with a plurality of holes as shown in Fig. 4.

In the present invention, it is preferable to form the fishtrap 1 using polyethylene terephthalate (PET), which has a good transparency, durability, thermal resistance, cold temperature resistance and impact resistance.

In the drawings, the reference numerals 15 and 25 denote depressions, which are provided on the respective hoppers of the parts 10 and 20 and are adapted for applying the paste bait to the respective parts 10 and 20.

In the first step, the parts 10 and 20 are molded into a single structure by the blow molding process so that a female screw portion 11 of the first part 10 integrally extends to a male screw portion 21 of the second part 20. In the single structure formed by this first step, the hopper of the second part 20 is provided with a central opening 24, while the central portion "S" of the hopper of the first part 10 is closed.

In the second step, the single structure of the first step is divided into two parts 10 and 20 using a cutting

means. The divided first and second parts 10 and 20 can be assembled into a single body by screwing the female screw portion 11 of the first part 10 onto the male screw portion 21 of the second part 20 as shown in Fig. 5.

5 In the third step, each part 10, 20 is punched by a punching means thus being provided with a plurality of water flow holes. That is, a plurality of outer rim holes 12, 22 are longitudinally formed on the outer edge of the hopper of each part 10, 20, while a plurality of inner rim
10 holes 13, 23 are transversely formed on the inner edge of each part 10, 20. In this step, the closed central portion "S" of the hopper of the first part 10 is holed to provide a central opening 14.

 As described above, the present invention provides a
15 method for manufacturing fishtraps. In accordance with the method of this invention, first and second fishtrap parts 10 and 20 are molded into a single structure by a blow molding process. The method thus provides a thin fishtrap and thereby reduces the cost of the fishtrap.
20 The fishtrap of this invention is formed of synthetic resin such as PET having a good transparency, durability, thermal resistance, cold temperature resistance and impact resistance so that the fishtrap can be used for a lengthy period of time without damage or breaking.

25 Although the preferred embodiments of the present

invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the
5 invention as disclosed in the accompanying claims.

WHAT IS CLAIMED IS:

1. A method for manufacturing a fishtrap, said fishtrap comprising first and second fishtrap parts selectively integrated into a single body, comprising the
5 steps of:

molding said first and second fishtrap parts into a single structure by a blow molding process;

dividing said single structure into the first and second fishtrap parts; and

10 punching the first and second fishtrap parts in order to form a plurality of holes on the respective parts.

2. The method according to claim 1, wherein said fishtrap is formed of polyethylene terephthalate.

3. The method according to claim 1, wherein the
15 junction between the first and second fishtrap parts is provided with female and male screw portions, said screw portions being separated from each other and belonging to the first and second fishtrap parts, respectively, when dividing the single structure into the respective fishtrap
20 parts.

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FIG. 1

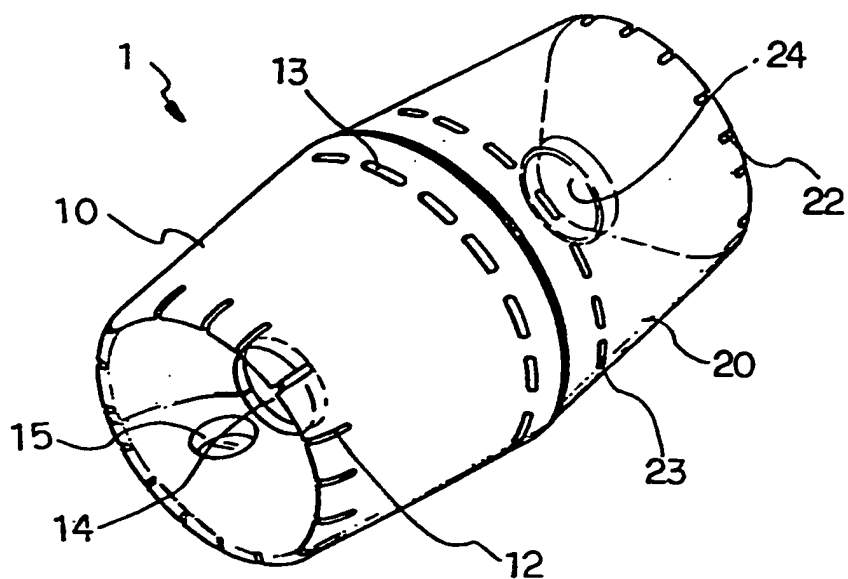
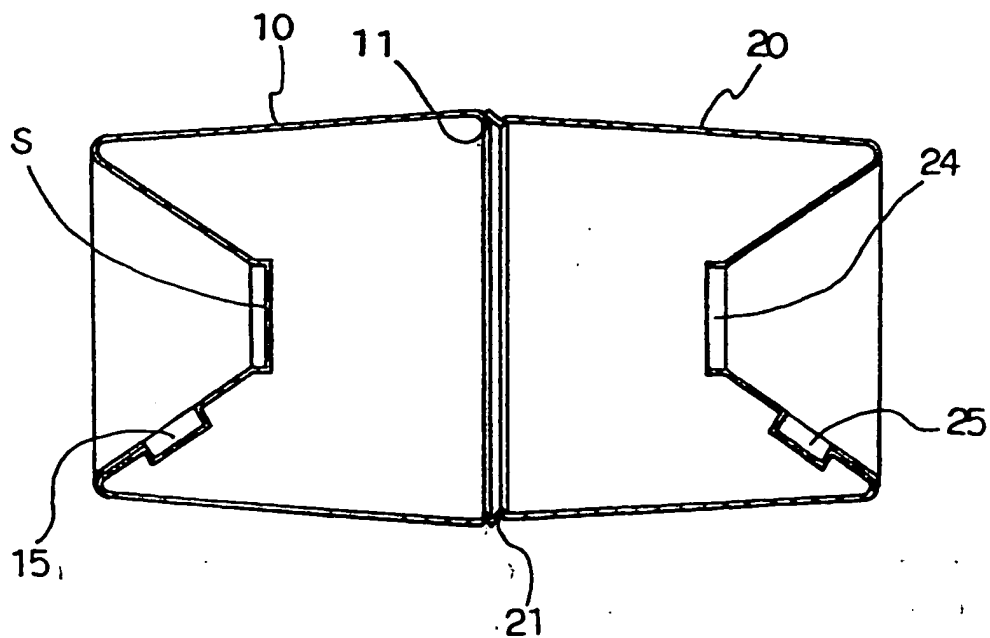


FIG. 2



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FIG. 3

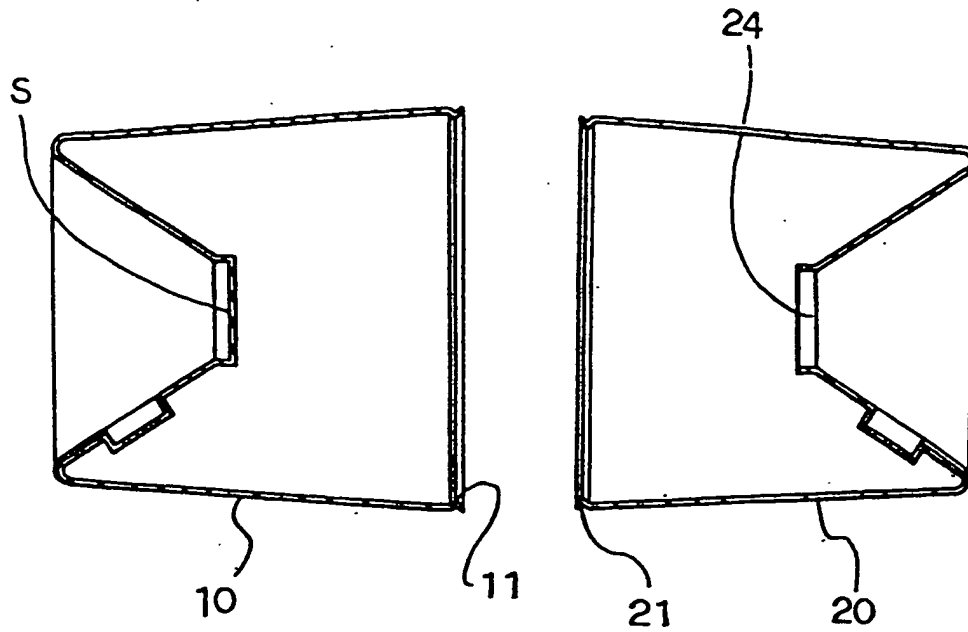
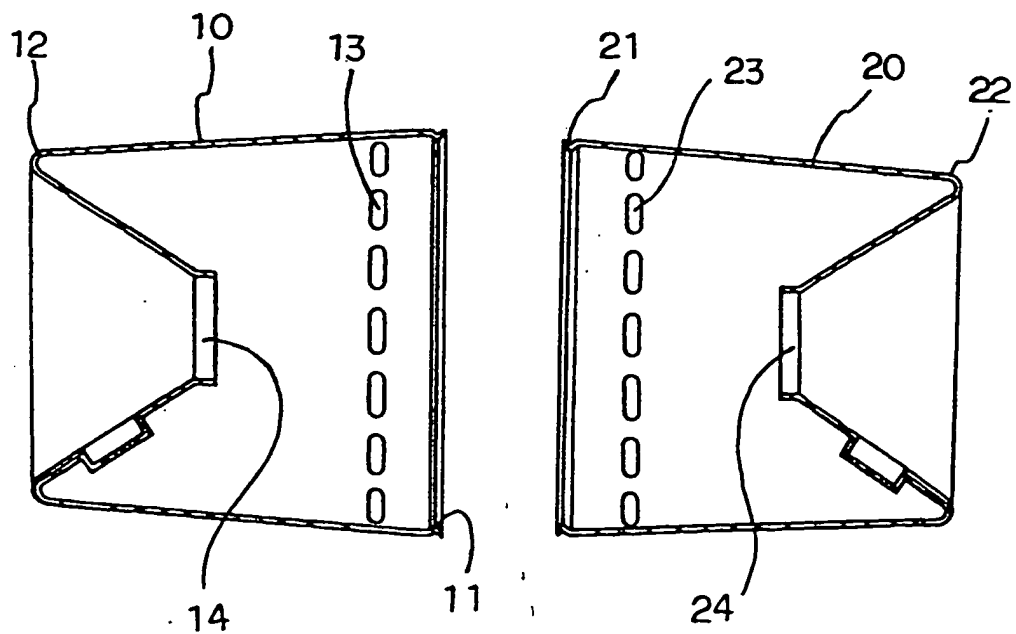
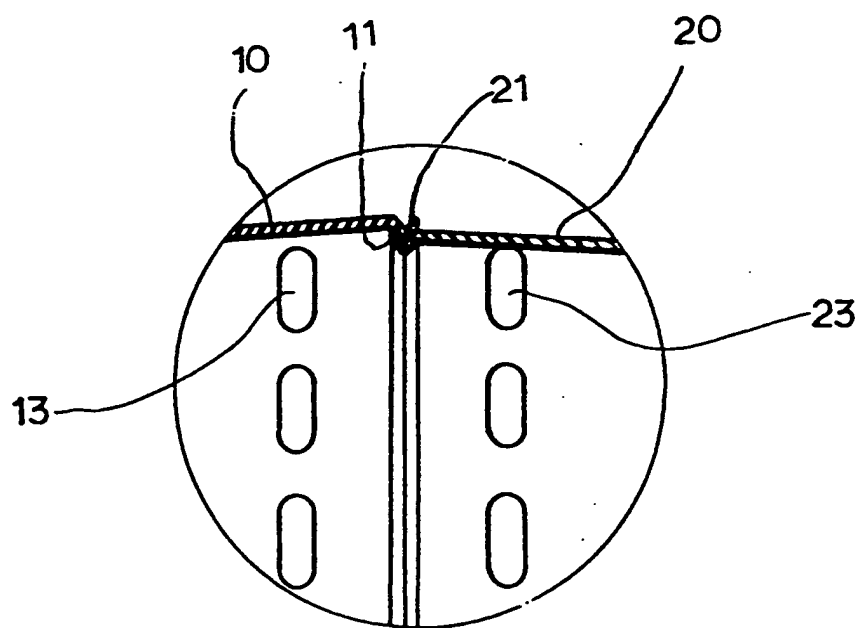


FIG. 4



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FIG. 5



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR 96/00126

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁶: A 01 K 69/06; B 29 C 49/00

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B. FIELDS SEARCHED

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 21 63 144 B2 (OWENS-ILLINOIS, INC.) 27 July 1972 (27.07.72), fig.19.	1
A	US 4 759 149 A (DUNN) 26 July 1988 (26.07.88), abstract.	1
A	GB 2 255 702 A (RYDER et al.) 18 November 1992 (18.11.92), abstract.	1
A	WO 93/15 602 A1 (LAINE) 19 August 1993 (19.08.93),	
A	US 3 497 989 A (SCHULTZ et al.) 03 March 1970 (03.03.70).	
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Date of the actual completion of the international search

26 September 1996 (26.09.96)

Date of mailing of the international search report

09 October 1996 (09.10.96)

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